

**FRESNO, CALIFORNIA
CLASS SPECIFICATION**

MECHANICAL TECHNICIAN

FLSA STATUS:

Non-Exempt

CLASS SUMMARY:

The Mechanical Technician is the third level in a five level Mechanical series. Incumbents are responsible for performing skilled vehicle, machinery, and equipment installation, maintenance, troubleshooting, and repair activities.

Distinguishing characteristics within the class, depending upon specialized area of assignment are, responsibility for independently performing mechanical maintenance and repair activities in an assigned area of responsibility, which may include: auto body, air conditioning, fire equipment, heavy equipment, helicopters, light equipment, or park equipment.

The Mechanical Technician is distinguished from the Assistant Mechanical Technician by its responsibility for performing journey maintenance and repair of equipment, mechanical machinery, and control systems. The Mechanical Technician is distinguished from the Senior Mechanical Technician, which is responsible for making work assignments, overseeing the work of other technicians, training, ordering and distributing supplies, preparing reports, and performing administrative tasks in the absence of the supervisor.

TYPICAL CLASS ESSENTIAL DUTIES: (These duties are a representative sample; position assignments may vary.)

**FRE-
QUENCY**

- | | | |
|----|---|---------------|
| 1. | Inspects, overhauls, repairs, and maintains a wide variety of vehicles and equipment, including component and computerized systems. | Daily
20% |
| 2. | Troubleshoots diagnoses and performs complex, skilled repairs and/or overhauls to vehicles and equipment in assigned area of responsibility, including inspecting and replacing of broken or worn parts. | Daily
20% |
| 3. | Diagnoses, repairs, cleans, adjusts and installs fuel, ignition, electrical, cooling, HVAC, hydraulic, and pneumatic systems involving repair and replacement of applicable parts which, depending on assignment, may include carburetors, fuel pumps, starter motors, distributors, generators/alternators, voltage regulators, wiring, switches, batteries, radiators, thermostats and water pumps. | Daily
10% |
| 4. | Diagnoses, repairs, overhaul, and rebuild transmission systems and engines. | Monthly
5% |
| 5. | Performs preventative maintenance and servicing activities which, depending on assignment, may include: changing oil; changing filters; applying lubricants; checking fluid levels; inspecting brakes, chassis components, and tires; and performing other related activities. | Weekly
5% |

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<u>TYPICAL CLASS ESSENTIAL DUTIES:</u> (These duties are a representative sample; position assignments may vary.)		<u>FRE- QUENCY</u>
6.	Uses and maintains a full set of hand, power and shop tools and equipment related to the work, observing safe work methods and utilizing safety equipment related to the work.	Daily 10%
7.	Completes a variety of logs, documents, and/or simple reports regarding quantity of materials handled, equipment operations, vehicle conditions, maintenance and repair activities, and/or other related information.	Daily 10%
8.	Performs vehicle safety inspections to ensure proper and safe functioning of applicable vehicles and equipment.	Daily 5%
9.	Installs, repairs, and replaces a variety of ignition systems, transmissions, differentials, axles, and/or other related parts.	Weekly 5%
10.	Monitors available inventory and notifies appropriate individual(s) when stock levels reach specified levels.	Weekly 5%
11.	Fabricates parts and tools utilizing lathes, shapers, drill presses, and welding equipment.	Weekly 5%
12.	Assists with training lower-level staff on work methods.	As Required
13.	Provides on-call service, as required	As Required
14.	Performs other duties of a similar nature or level.	As Required

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POSITION SPECIFIC RESPONSIBILITIES MIGHT INCLUDE:

Positions assigned to Body & Fenders may be responsible for:

- Preparing vehicles for painting and refinishing;
- Sanding, puttying, priming, and painting vehicles and equipment;
- Measuring, cutting, and installing vehicle windows and windshields.
- Welding, cutting, and fabrication of metal, plastic, and fiber glass materials for vehicle and /or equipment repairs and/or modifications.

Positions assigned to Helicopter Mechanic may be responsible for:

- Implementing aircraft flight acceptance procedures, including assisting with test flights;
- Implementing major and minor repairs and air frame modifications in accordance with FAA regulations;
- Cleaning of aircraft and preventive maintenance;
- Updating aircraft maintenance manuals;
- Inspecting aircraft after maintenance activities to determine if aircraft is ready for flight;
- Assisting with scheduling and performing aircraft maintenance.
- Maintaining flight and engine management instruments and equipment
- Maintaining aircraft oxygen systems.

Positions assigned to Buses, Light, and Heavy Equipment may be responsible for:

- Repairing emergency standby power generators;
- Performing complex repairs and maintenance of electrical and computer systems;
- Troubleshooting, repairing, and maintaining hydraulic systems;
- Repairing and maintaining engine fuel systems, throttle linkages, and injection pumps;
- Performing complex diagnostic work, repair, and maintenance of suspension and steering systems;
- Preparing City vehicles for use or disposal.
- Installing, repairing, and replacing HVAC, ignition systems, transmissions, and other applicable parts.
- Repairing and maintaining brake systems.

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POSITION SPECIFIC RESPONSIBILITIES MIGHT INCLUDE:

Positions assigned to Fire Equipment may be responsible for:

- Diagnosing, overhauling, and repairing fire equipment and apparatus, including engines, trucks, pumps, generators, emergency lighting, self-contained breathing apparatus, siren systems, communication systems, air brake systems, and ladders;
- Filling self-contained breathing air cylinders;
- Disassembling, repairing, and testing pumps, air compressors, resuscitators, extension ladders, and related equipment to NFPA guidelines;
- Repairing and overhauling diesel and gasoline engines, ignition systems, and air brake systems;
- Diagnosing, troubleshooting, and repairing computer controlled systems on fire apparatus and fire equipment.
- Removing and disposing of tested hazardous waste or materials
- Assisting and accompanying fire personnel with support equipment and services, as required.

Positions assigned to Vehicle Air Conditioning may be responsible for:

- Implementing winter maintenance procedures;
- Inspecting, maintaining, and repairing refrigeration equipment;
- Inspecting, maintaining, repairing, and overhauling bus HVAC systems for leaks, worn or defective parts, and other malfunctions;
- Preparing air conditioning components for rebuilding;
- Preparing buses for pick-up and delivery.

Positions assigned to Parks Equipment may be responsible for:

- Repairing small engines.
- Assisting and maintaining inventory and orders parts, as needed

Training and Experience (positions in this class typically require):

- High School Diploma, or GED, and two years of journey level experience are required;
OR
- Or, an equivalent combination of education and experience sufficient to successfully perform the essential duties of the job such as those listed above.

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Licensing Requirements (positions in this class typically require):

Some positions, based on assignment, may require:

- Basic Class C License
- Commercial Class B license with airbrake endorsements and Tank endorsements
- Commercial Class B License with passenger endorsement
- One or more licenses or certifications related to the specific technical discipline may be required, preferred, or desired

Knowledge (position requirements at entry):

Knowledge of:

- Applicable tools and equipment utilized in assigned area or responsibility;
- Applicable terminology utilized in the trade;
- Methods, materials, techniques and equipment utilized in assigned area of responsibility;
- Inventory management principles and practices;
- Vehicle and/or equipment maintenance and repair practices and procedures in assigned area of responsibility;
- Safe work practices and procedures.

Skills (position requirements at entry):

Skill in:

- Coordinating and implementing preventative maintenance to applicable vehicles and equipment
- Troubleshooting, diagnosing, and resolving vehicle and equipment problems, and malfunctions
- Monitoring and participating in the preparation and maintenance of operational reports, logs and records
- Performing vehicle and equipment maintenance and repairs in assigned area of responsibility
- Diagnosing mechanical, hydraulic, pneumatic, electrical, and electronic malfunctions in instrumentation, programmable logic controllers, and telemetry systems
- Reading and interpreting blueprints, schematics, and other technical drawings related to job duties
- Using and maintaining applicable tools, equipment, vehicles, and hardware and software related to job duties
- Communication, interpersonal skills as applied to interaction with coworkers, supervisor, the general public, business, organizations, elected and appointed officials, media, etc. sufficient to exchange or convey information, give/receive work direction

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Physical Requirements:

Positions in this class typically require: feeling, finger dexterity, grasping, hearing, repetitive motions, seeing, talking, bending, kneeling, lifting, reaching, standing, stooping, walking, balancing, climbing, crawling, crouching, pulling and pushing.

Very Heavy Work: Exerting up to 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects.

Incumbents may be subjected to moving mechanical parts, electrical hazards, vibrations, fumes, odors, dusts, poor ventilation, adverse weather conditions, environmental hazards, gasses, chemicals, oils, work space restrictions, inadequate lighting, intense noises, and travel.

Note:

The above job specification is intended to represent only the key areas of responsibilities; specific position assignments will vary depending on the business needs of the department.

Classification History:

Draft prepared by Fox Lawson & Associates (LM)

Date: 11/2007

Reviewed by the City of Fresno

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